


LEGEND

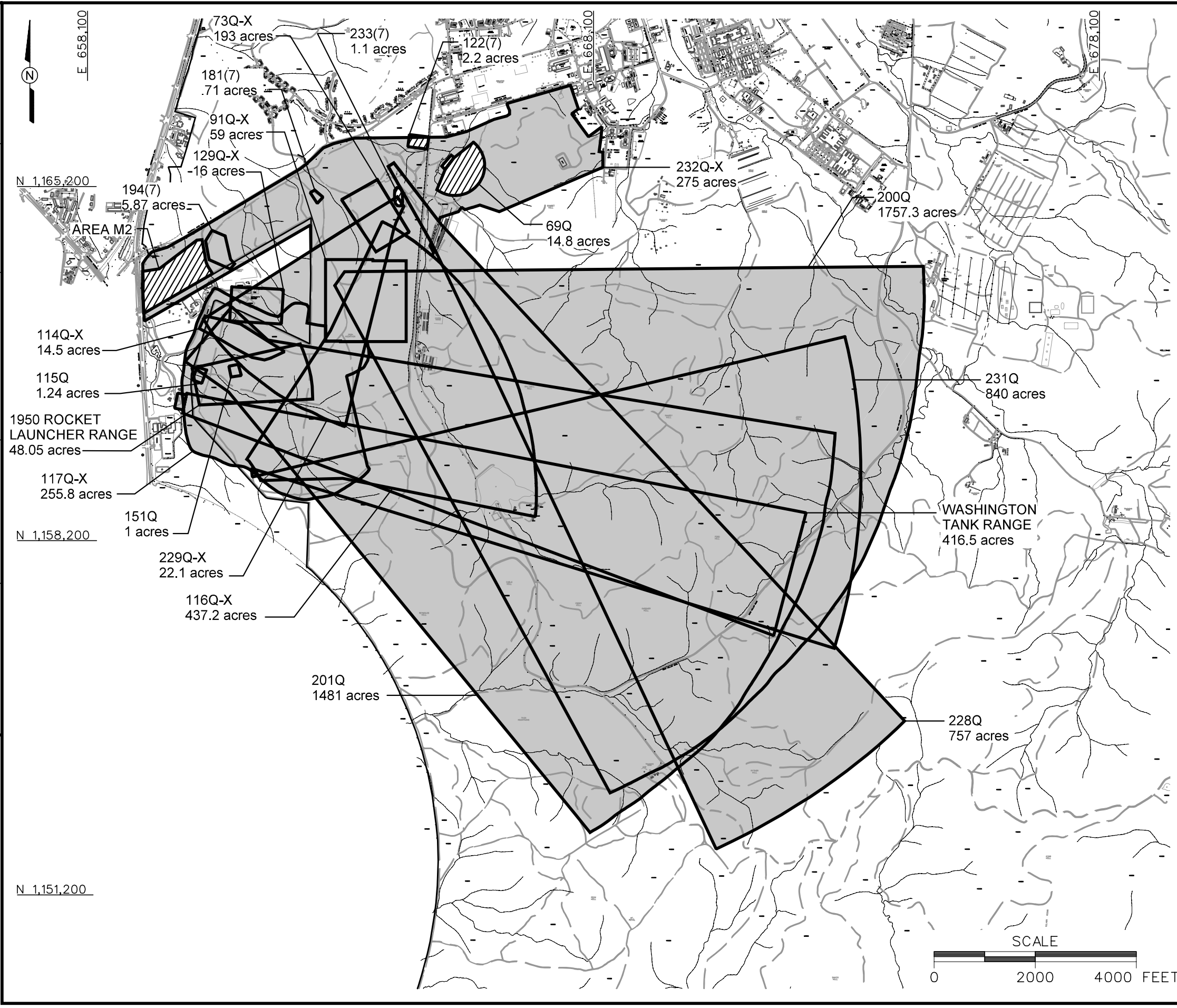
 FORT McCLELLAN BOUNDARY

FIGURE 1-1
SITE LOCATION MAP
RANGES WEST OF IRON MOUNTAIN ROAD
PARCELS 181(7), 194(7), 518(7), 73Q-X, 91Q-X, 114Q-X, 115Q, 116Q-X, 117Q-X, 129Q-X, 151Q, 200Q, 201Q, 228Q, 229Q-X, 231Q, 232Q-X, WASHINGTON TANK RANGE AND 1950 ROCKET LAUNCHER RANGE

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

 **IT CORPORATION**
A Member of The IT Group

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STARTING DATE: 03/03/00
DATE LAST REV.:
DRAWN BY: D. BILLINGSLEY
DRAFT, CHECK, BY:
ENGR, CHECK, BY: J. RAGSDALE
INITIATOR: J. RAGSDALE
PROJ. MGR.: J. YACOB
DWG. NO.: ... 796887es.054
PROJ. NO.: 796887



- LEGEND**
- UNIMPROVED ROADS AND PARKING
 - PAVED ROADS AND PARKING
 - BUILDING
 - TREES / TREELINE
 - PARCEL BOUNDARY
 - PARCELS EXCLUDED FROM THE STUDY AREA
 - BRIDGE
 - CULVERT WITH HEADWALL
 - SURFACE DRAINAGE / CREEK
 - MANMADE SURFACE DRAINAGE FEATURE
 - FENCE
 - UTILITY POLE

FIGURE 1-2
SITE MAP
RANGES WEST OF IRON MOUNTAIN ROAD
PARCELS 181(7), 194(7), 518(7), 73Q-X, 91Q-X, 114Q-X, 115Q, 116Q-X, 117Q-X, 129Q-X, 151Q, 200Q, 201Q, 228Q, 229Q-X, 231Q, 232Q-X, WASHINGTON TANK RANGE AND 1950 ROCKET LAUNCHER RANGE

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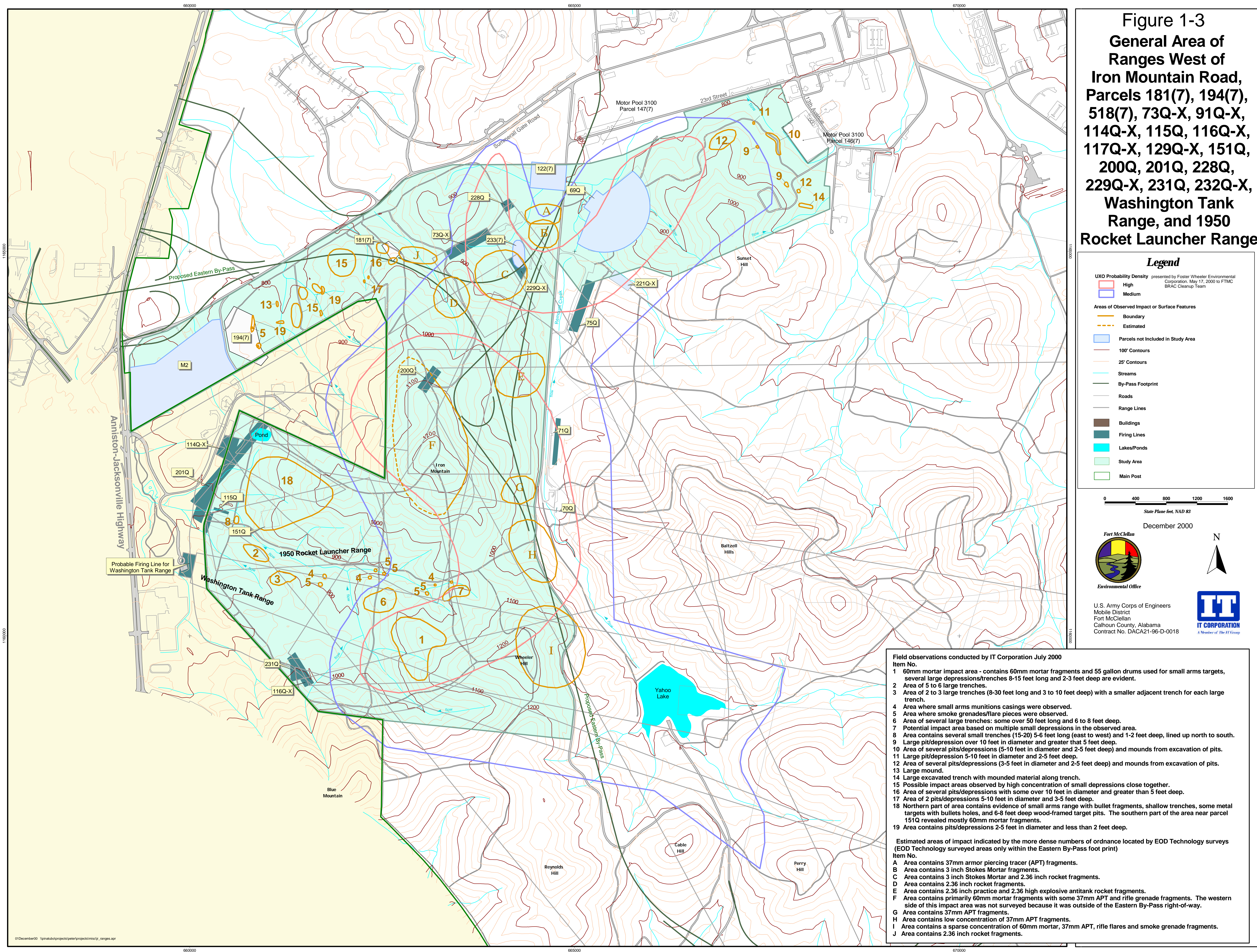
- Parcel 129Q-X, Former Mock Vietnam Village
- Parcel 151Q, Former Rifle Range
- Parcel 200Q, Former Rifle Range
- Parcel 201Q, Former Rifle Range
- Parcel 228Q, Former Machine Gun Transition Range
- Parcel 229Q-X, Former Rocket Launcher Range
- Parcel 231Q, Former Range O.Q.-2A
- Parcel 232Q-X, Area 45
- Washington Tank Range
- 1950 Rocket Launcher Range.

The Ranges West of Iron Mountain Road include the area in the western portion of the Main Post from Summerall Gate Road south to Yahoo Lake and west to just north of Blue Mountain (Figure 1-3). The east-west limits of the area are from the western boundary of the Main Post, east to Iron Mountain Road, north of Yahoo Lake. However, Parcel 232Q-X extends to the east side of Iron Mountain Road in the northern section of the study area (Figure 1-3).

Several of the ranges included in this study area have safety fans that exceed the likely impact areas based on the type of munitions reportedly used at each range. These safety fans cover an extremely large area that is not representative of the actual impact areas. The SIs will focus sample locations in the areas of the likely firing lines and the probable impact areas of each range, if they can be determined. Sample locations will not be proposed over the entire safety fans. Because of the number of ranges and the subsequent overlapping of ranges in this study area, impact areas will not be linked to specific firing lines.

The investigation will not extend beyond of the current Main Post boundary, although some of the parcels have firing lines and areas indicated outside the current western Main Post boundary. The ranges at Parcels 200Q and 228Q and possibly other ranges in this study area have probable impact areas that are on the east side of Iron Mountain Road. The probable impact areas of these ranges overlap other former ranges located on the east side of Iron Mountain Road. The probable impact areas for Parcels 200Q and 228Q will be investigated with the ranges located east of Iron Mountain Road. Therefore, with the exception of Parcel 232Q-X in the northern part of the study area, the study area for this SI will not extend east beyond Iron Mountain Road.

Figure 1-3 presents the study area for the Ranges West of Iron Mountain Road with probable UXO impact areas derived from several sources. The larger impact areas (shown by red and blue polygons) indicate probable UXO impact areas based on high density areas (within red



polygons) and medium density areas (within blue polygons) that were developed through records review and field reconnaissance conducted by Foster Wheeler Environmental Corporation (Foster-Wheeler) (Foster-Wheeler, 2000). The smaller brown polygons labeled with letters are estimated areas of impact based on the density of ordnance located by explosive ordnance disposal (EOD) Technology, Inc. surveys for the areas within the eastern bypass right-of-way. The other brown polygons with numerals represent areas with notable physical characteristics (e.g., trenches, depressions, mounds, berms, etc.) observed by IT field personnel during July 2000. IT personnel were unable to walk some of the areas due to access restrictions because of ongoing UXO remediation in the area of the eastern bypass right-of-way. This included a large area in the center of Parcel 232Q-X from the eastern edge of Parcel 181(7) east to Iron Mountain Road and from Summerall Gate Road south to just south of Iron Mountain and Parcel 91Q-X.

The elevation in this area ranges from about 790 feet above mean sea level (msl) in Parcel 232Q-X, near Area M2, to 1,270 feet at the top of Iron Mountain in the central-eastern portion of the study area (Figure 1-3). The highest elevation of the study area is a ridge along the western side of Iron Mountain Road. This ridge, which runs primarily north and south, slopes to the west and northwest, and connects Iron Mountain and Wheeler Hill. This ridge appears to have been a backstop to most of the ranges in this study area. The orientation of most of the ranges are northwest to southeast or west to east and appear to use Iron Mountain, Wheeler Hill, and connecting ridges as backstops. However, one range in the study area, Parcel 229Q-X, Former Rocket Launcher Range, is oriented northeast to southwest.

Iron Mountain, at 1,270 feet msl, and Wheeler Hill, at about 1,260 feet msl, are the tallest mountains within the central-eastern and southeastern areas of the Ranges West of Iron Mountain Road (Figure 1-3). Three mountains comprise the southern limit to the Ranges West of Iron Mountain Road including, west to east, Blue Mountain (1,516 feet msl), Reynolds Hill (1,378 feet msl), and Cable Hill (about 1,240 feet msl). The intermittent streams that drain the study area flow primarily to the northwest.

The following sections provide information of the individual sites comprising the Ranges West of Iron Mountain Road that are included in the investigation (Figure 1-3). The descriptions of the parcels include available historical information about each site as well as general figures showing the ranges and the extent of the safety fans.

1.2.1 Area 45, Parcel 232Q-X and Adjacent Sites and Ranges

Area 45, Parcel 232Q-X, is in the northern portion of the study area. Area 45 extends from the western boundary of the Main Post across Iron Mountain Road and to just west of 13th Avenue. Area 45 is oriented east-west and includes areas just south of Summerall Gate Road, north of Iron Mountain, east of the western Main Post boundary, and west of the Motor Pool Area 3100 located on 13th Avenue (Figures 1-3 and 1-4). The study area for Area 45 east of Iron Mountain Road is mostly along the north slope of Sunset Hill. Drainage of this area is primarily to the north and through intermittent tributaries connecting to Remount Creek that flows north along the east side of Iron Mountain Road.

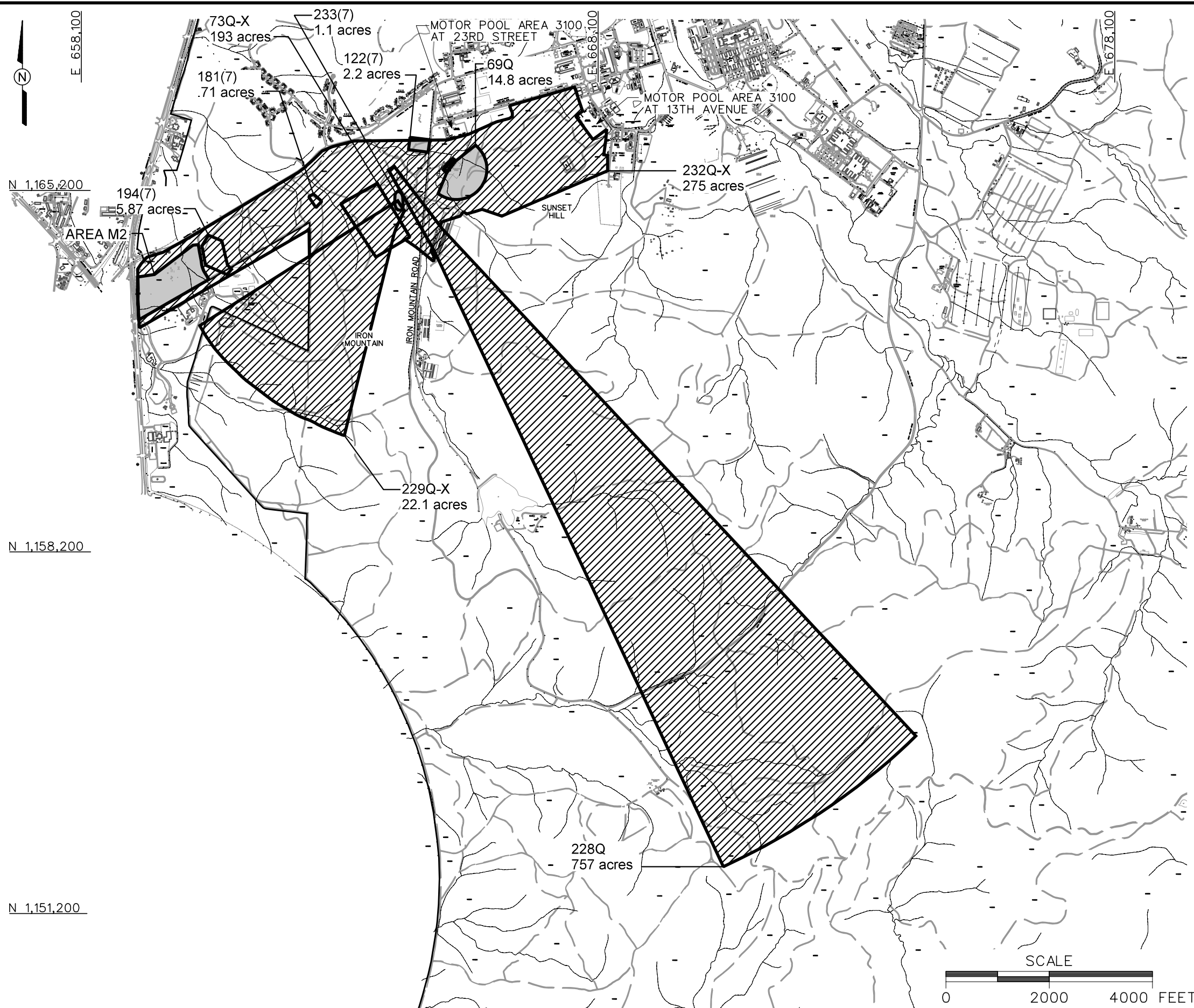
The central portion of Area 45, Parcel 232Q-X, along both sides of Iron Mountain Road and continuing to the south, was known as Combat Range No. 2 (USACE, 1999a). Built during the inter-war period, the initial use of the combat range is unknown. During World War II, Combat Range No. 2 was divided into other ranges including a rocket range, a machine gun range, and two rifle grenade ranges. By 1958, all ranges in this area were closed or abandoned.

The sites and ranges within or bordered by Area 45, Parcel 232Q-X, include the following:

- Parcel 181(7), Training Area T-4: Former Biological Simulant Test Area
- Parcel 194(7), Former Weapons Demonstration Area
- Parcel 518(7), South Gate Toxic Gas Yard
- Parcel 73Q-X, Range 17, Explosives Proficiency Training Area
- Parcel 228Q, Former Machine Gun Transition Range
- Parcel 229Q-X, Former Rocket Launcher Range.

Several former ranges and other sites are located within Area 45, but some are excluded from this SI because they are being investigated under separate work plans. However, existing samples collected at some of these areas are referenced in Chapter 4.0 because of the proximity of the sample locations to areas of concern within the Ranges West of Iron Mountain Road. The sites and ranges within Area 45 excluded from this SI include the following (Figure 1-4):

- Area M2, Subsection of Area 45
- Parcel 69Q, The Skeet Range
- Parcel 122(7), Former Fog Oil Storage Area
- Parcel 221Q-X, Former Rifle Grenade Range North of Washington Ranges
- Parcel 233(7), Fill Area West of Range 19.



LEGEND

UNIMPROVED ROADS AND PARKING

PAVED ROADS AND PARKING

BUILDING

TREES / TREELINE

BRIDGE

CULVERT WITH HEADWALL

SURFACE DRAINAGE / CREEK

MANMADE SURFACE DRAINAGE FEATURE

FENCE

UTILITY POLE

PARCELS INCLUDED IN SITE INVESTIGATION (SI) REPORT

PARCELS EXCLUDED FROM THE SITE INVESTIGATION (SI)

FIGURE 1-4
SITE MAP
AREA 45, PARCEL 232Q-X AND
ADJACENT SITES AND RANGES
PARCELS 181(7), 194(7), 518(7),
73Q-X, 228Q, AND 229Q-X

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Training Area T-4. Training Area T-4, Parcel 181(7), is located in the western part of the Main Post, south of Summerall Gate Road, near the western Main Post border (Figure 1-5). The area, which covers approximately 0.25 acre, was in use from 1965 to 1971 and is not fenced. Surface topography at the site ranges from 860 feet above msl to approximately 880 feet above msl and slopes to the north toward Summerall Gate Road and to the west toward the western Main Post boundary. A 1973 U.S. Army photograph of Training Area T-4 shows a circular disturbed area centrally marked by a concrete monument (Science Applications International Corporation [SAIC], 1999). Similar concrete markers at FTMC have been associated with former training site locations and/or burial sites.

During the October 1991 site visit by U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) and SAIC, the area of the former site identified by the Base had been extensively reworked and there was not any evidence of a former site observed at the location (SAIC, 1993). In May 1998, USACE-St. Louis Engineer district personnel walked the identified area for Training Area T-4 and did not find any evidence of the previous training activities (USACE, 1999a). There was not any surface contamination observed or burial area found (USACE, 1999a).

Biological simulants, *Bacillus globigii* (BG), a persistent spore-forming organism, and *Serratia marcescens* (SM), a nonpersistent spore-forming organism, were used at Training Area T-4 (Environmental Sciences and Engineering, Inc. [ESE], 1998). Both biological simulants are naturally occurring and the organisms are believed to be generally harmless when used with prescribed safety precautions. These biological simulants were used in relatively small amounts in individual exercises. It is believed that any disseminated biological materials that may have escaped decontamination procedures would have been destroyed by natural processes (ESE, 1998). Other materials formerly used at this site consisted of the decontamination agents supertropical bleach (STB) and Decontamination Solution Number 2 (DS2) (ESE, 1998).

Surface soils were reportedly decontaminated using STB and DS2. It was reported that Training Areas T-4 or T-5 may have been the site of a 110-gallon distilled mustard (HD) spill, which reportedly occurred in 1955 (ESE, 1998). None of the personnel interviewed during the environmental baseline survey (EBS) site visit could recall a 110-gallon spill, nor could they imagine a scenario during which a spill of this magnitude could occur; however, the HD simulant, molasses residue (MR), was delivered in 55-gallon drums. Analyses of surface soil samples collected in April and July 1973 did not detect HD contamination. The area is